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NOTES:**

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## Movements in Land-Use Regulations

### Highlights

- ❑ Growing Smarter Plus will produce more open space
- ❑ More open actually increases the distances covered by the transportation system.
- ❑ Smart growth policies will adequately price the value of transportation as opposed to attempting to change it.

### Background

Within Phase 1 of this research project a consensus was drawn up that stressed that the communities of the greatest economic development opportunities in the future were those that would possess the following characteristics:

- High-quality communications infrastructure
- Presence of an economic “gardening” planning process
- Innovative networking alliances within government that increase efficiencies and lower costs
- Entrepreneurial networking and venture capital organizations

- Capital-intensive, global, teacher-guided educational systems
- Cheaper, quicker, smarter transportation systems

Thus, community planning, inter-governmental cooperative alliances, commitment to education and telecommunications systems and innovative transportation systems are important attributes to a community’s successful economic development. Not surprisingly, as mentioned in Phase 1, these are also the attributes of a community’s “Smart Growth” Plan as well. Hence, an integration of these aspects of economic development with aspects of community planning is imminent. And, states and regions that recognize this connection will be the ones that grow with the highest level of sustainability.

The questions of importance to a transportation specialist become: how will these new community planning processes that merge economic development with planning and zoning change transportation needs? And, is there a rule of thumb for traffic flows that emerges from an appraisal of a community’s comprehensive plan? Both of these questions will be addressed in this long-term profile of community planning in Arizona.

## **Findings**

In order to confront sprawl in Arizona, Growing Smarter and Growing Smarter Plus were introduced into the statutory portfolios of community planning. Now, when a community is faced with a land-use amendment it has more checks and balances to assure that the change confers with the community's plans.

### **What Does Growing Smarter Plus Do To Transportation?**

Six out of the nine planners surveyed stressed that one change was eminent with Growing Smarter Plus—Growing Smarter Plus will produce more open space. Kirk Haines of the Peoria Parks and Recreation Department summed it up tritely by claiming that communities will now have “mega open spaces” that are connected and linked to other communities. While the dissenters in the survey did not reject this fact outright, they emphasized that while Growing Smarter Plus was striving to encourage more open space, many communities will discount this pressure. Some communities may be reluctant to change their current land use plans and thus, they too will disregard the push for more open space.

Regardless, for recreational and aesthetic purposes, an increase in open space allotment is welcomed by the general public. But the impact on transportation could be just the opposite of what was intended. When a community still has available land, requiring more open space around each community node actually increases the distances covered by the transportation system.

One of two things will happen. On one hand, if a region or a community has an abundance of available, developable land—the distances between the nodes increases due to the larger percentages of open space. On the other side, however, are regions or communities

without this abundance of land. In these instances, the vacant or underutilized land will now command a higher value due to the decline in land available for development. This higher value or price works to balance out this demand with lower levels of supply. In most communities in Arizona, land is plentiful. So, the first case will most likely be the one most experienced in communities here. Thus, in the future, Arizonans will be traveling farther to their intended destinations -- since acres of open space must be transcended in order to get to the final point of destination.

From this representation it becomes apparent that it is not just “growth” alone that increases the needs for personal transportation. As technology moves to lower the costs of transporting and as open space creates more chasms between destinations, we will be traveling even more. Sooner or later, “Smarter Growth” will simply acknowledge that just as individuals place a higher value on single-family homes with backyards, individuals also will continue to place even more value on personal transportation. Thus, “Smarter Growth” policies will begin to acquiesce to adequately pricing the value of this transportation as opposed to attempting to change it.

To get an idea of what Growing Smarter Plus will do to this greater-distance theory in Arizona, VisionEcon investigated the relationship between some economic and land use indicators and the ensuing traffic counts within a community. VisionEcon developed a simple “rule of thumb” for transportation planners by examining the transportation relationship between Peoria, Glendale and Phoenix. The application of a simple rule of thumb allows transportation planners who do not have access to extensive data sets and meticulously-constructed models to still create an estimate of future flows.

The first gauge used in the rule of thumb estimates the amount a community is self-contained. In essence, the more a community's residents work and shop within the same node—the lower its transportation demands. Hence, this gauge attempts to mathematically categorize that self-containment. It looks at the share of a community's population to that of its all of its neighbors, and compares that ratio to the community's share of total retail sales and employment. For instance, looking at Peoria, since it is a "young" town, in terms of its stage in the maturation process for a community, its share of the population is much higher than its share of the retail sales and employment in the three-community locality. Thus, this gauge suggests that its residents work and shop elsewhere. As the community works to change this mix, the transportation flows between Peoria, Glendale and the major job center of Phoenix will lighten. This gauge works to incorporate the "here and now" of traffic counts.

The second gauge measures the visions of the future by looking at land use. Using the same logic, by comparing the percentage of land classified as residential to the percentage of land classified as industrial or commercial in the comprehensive plan, a planner can distinguish whether the traffic loads will change in the future.

The final gauge measures the magnitude of "travelers" within a community. In Peoria, for instance, while its labor force is a small percentage of its population, many of its travelers fit into two other categories: active seniors or parents of active children. Consequently, a planner would need to measure the size of the labor force plus these other two categories of active travelers in the community.

These three gauges unveiled the following relationship for transportation planners: the percentage of potential travelers

that may be found on a community's streets grows exponentially. And, the rate at which it grows is reflective of a combination of two things: (1) the percentage of population unserved by the community's retail and employment opportunities and (2) the ratio of residential to business land use classes.

Thus, as community planners work to encourage more "new urbanism" developments where home, work and shopping opportunities are all condensed, the percentage of potential travelers on the streets will taper off. Yet, this relationship is dynamic. As other characteristics of the population change and as transportation costs vary so will the gauges that change the rate at which the traveling population grows.

## **Conclusions**

Decisionmakers all around the nation are being bombarded with transformations like never before. The economic environment has been transformed. The phrase "New Economy" tries to characterize an economic system where the creation of ideas carries greater value than the physical blending of atoms in a manufacturing setting. With knowledge and ideas of utmost value, telecommunications and educational infrastructure become of utmost importance to a community. Also, when that knowledge is shared through the networking of organizations within a community, an increase in living standards is perceived by all involved. Ironically, this increase in living standards and the increased needs for networking imply even more travel for the average citizen in the future.

The second dimension of change has come in the form of community planning. The worlds of economic development and community planning are now commingling. Nowhere else is that commingling more obvious than in Arizona's new crop of comprehensive plans. With Growing Smarter Plus, communities are now looking at the connections between

economic growth and land use planning. They are learning that in order to preserve important aspects of a community—you need the financial resources from economic growth. Yet, if economic growth is not carefully planned— it will be too late to preserve anything.

In addition, the “New Economy” trends of decentralization and accountability of government are pushing community planning to become more open to public participation and more resolved to monitoring the end results or outcomes of that planning. In the end, any community planning procedure that cannot be quickly harmonized to an ever-changing high-tech environment or the ever-changing ideas of its citizenry will be doomed to failure.

Consequently, technology is fostering the proliferation of what has been called “Edge Cities”, commercial nodes, or as coined by the City of Phoenix, “urban villages”. All of these concepts suggest that in the future, our communities will be striving to be more self-contained. Chances are higher that we will be

living, working, shopping all from our own communities in the future. Nonetheless, we will still be traveling more. The desire for more open space, which increases the distance between commercial nodes, and the continued need to travel between them, as well as the globalization of retail and manufacturing will all work to increase the number of miles traveled. Thus, just as communities are now searching for ways to ensure that the benefactors of new development cover the costs of providing public services, soon travelers will be approached to cover the costs of providing transportation services. As one policy expert said, “...when you confront citizens with their preference for raising revenues... user fees win hands down.”

In terms of transportation, Americans have become accustomed to “free rides” on the highways, and until the costs of this service are reflected in the reality of our personal budgets—we will continue to overburden our highway systems and any advanced transportation systems of the future.

The full report: *Movements in Land-Use Regulations* by Debra Roubik (Arizona Department of Transportation, report number FHWA-AZ-01-507(2), published June 2001) is available from the Arizona Transportation Research Center, 206 S. 17 Ave., Mail Drop 075R, Phoenix, AZ 85007; phone 602-712-3138.